adopted by the TRT
11/8/07

# BOTTLENOSE DOLPHIN PBR ALLOCATION ISSUE

**Situation:**

The bottlenose dolphin (BND) allocated PBR for the summer (MAY-OCT) for MN, NNC, and SNC is 48 in aggregate or 44 in the sum of the separate stocks. The $N_{min}$ for these stocks is 9682, based on a 1995 summer survey for the entire region from NJ to NC. The BND annual PBR for these stocks is 97 in aggregate and 88 in the sum, but only 50% is allocated to the summer season as a policy decision.

The BND allocated PBR for the winter (NOV-APR) for the combined NM, NNC, and SNC stocks is 23. The $N_{min}$ estimate for these stocks is 4691, based on a winter survey of the NC region only.

The $N_{min}$ estimates for the two seasons based on two surveys are inconsistent, if it is assumed that all BND are conserved within the NNC region. At this point no BND are assigned to the VA coast in the winter, yet BND fishery takes and strandings are reported in VA during the winter, and VA fishermen observe BND in coastal waters during the winter season. Therefore BND must be present in the coastal waters of VA in the winter, and despite the lack of survey data, an $N_{min}$ and PBR must be assigned to this area. Additionally, all PBR must be accounted for in any seasonal allocation plan.

**Questions:** (for the ASRG by some members of the TRT)

1. Which survey, the summer or winter, is more likely to provide the best estimate of the total population of the three stocks, NM, NNC, and SNC, realizing that there apparently is no significant difference between the estimates of the two surveys. How do we resolve the lack of spatial coverage for the winter survey when BND are known to be present in VA coastal waters.

2. Is it scientifically valid to use the results of the winter survey as an estimate of the BND offshore of NC only, and would this include all three stocks, NM, NNC, and SNC or only two stocks, NNC and SNC. Is there intermixing mixing of all three stocks during the winter, and if so, should they then be treated as individual stocks?

3. Is it scientifically valid to reassign unallocated PBR of the NM stock (remaining 50%) to the NM stock off VA in the winter? Alternatively if some of the summer NM stock moves offshore during the winter and is not vulnerable to fishing during that period, is it scientifically valid to only assign 50% of the PBR to that stock during the summer, (i.e. the entire PBR should be assigned to the summer season)?

4. If there is so much uncertainity in both the spatial and temporal distributions of the NM, NNC and SNC stocks, does it make scientific sense to regionally and seasonally allocate PBR at this time. Should the TRT simply consider total takes on the combined stocks against the total annual PBR, then use takes in individual fisheries by season and region to develop fishery specific take-reduction strategies?